

The minutes of the last meeting of the Board and Council were read.

Pending nomination, No. 388 was read.

On motion of Mr. Foulke, the Librarian was instructed to transmit by mail to the members of the Society its proceedings, so soon as published, except in cases where requested not to do so by the parties interested.

On motion of Dr. Le Conte, the letter of resignation of Prof. Frazer was taken from the table and accepted, and the Society was adjourned.

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*Stated Meeting, March 4, 1859.*

Present, twenty-two members.

Dr. WOOD, President, in the Chair.

New members were introduced : Dr. Evans by Dr. Bridges ; Judge Thompson by Mr. Fraley ; Dr. Wister by Dr. Le Conte.

A letter was received from Jordan & Brother, of Philadelphia, dated February 28, 1859, enclosing and requesting attention to a letter from the heirs of Joseph Horsfield, of Bethlehem, deceased, reclaiming through their agents, Jordan & Brother, a certain manuscript volume of correspondence relating to Indian Affairs in the last Century, deposited in the library of the A. P. Society by the said Joseph Horsfield, and so described in Vol. I. Part 1, of Historical and Literary Transactions, page 4.

The following donations to the Library were announced:—

Ten pamphlets of Natural History and one of Chimatology, from the proceedings of different societies.—*From Dr. Leidy.*

Monthly Notices . . . R. As. S. xix. iii. Jan. 14, 1857.—*From the Soc.*

Principles of Social Science, by H. C. Carey, III.—*From the Author.*

Reply of B. A. Gould to the Statement of the Trustees of the Dudley Observatory. Albany, 1859, (pamp. 8vo. 366 pp.)—*From the Author.*

First Annual Message of A. Henry, &c. Phila. 1859, (pamp. 172.)

—*From the Councils.*

Journal . . . S. Arts and Inst. in Union. London, VI. 280, 284.—

*From the Society.*

Proceedings A. N. S. Philada. 1859, i. ii. iii.—*From the Acad.*

Amer. Jour. Sci. and Art. New Haven, March, 1859.—*From the Ed.*

Dr. Leidy presented the following papers, intended for the Transactions, and remarked that they gave an account of the geology, and of the remains of some extinct vertebrata of a small portion of country near the head-waters of the Missouri, in the Territory of Nebraska.

This great territory, embracing upwards of 130,000 square miles, is composed of formations of the Cretaceous and later Tertiary periods, with here and there a protrusion of Metamorphic rocks. Watered by the many western tributaries of the Missouri, almost all of these, so far as they have been explored, have yielded large numbers of species of extinct organic forms, vegetable and animal.

From the Mauvaises Terres of White River, a miocene tertiary freshwater formation, apparently a lacustrine deposit, an immense quantity of fossil bones of extinct mammals and turtles have been collected. In collections made by gentlemen of the Fur Company, by Jesuit Missionaries, by Dr. Hayden; and in others obtained under the auspices of the government, the Smithsonian Institution, and Professor James Hall, altogether forming from 6000 to 8000 lbs. of fossils, submitted to Dr. Leidy's inspection—he had detected the remains of 30 extinct mammals and 1 turtle. Of these there are 10 species of the extinct genera of *ruminants*, *Oreodon*, *Agriochærus*, *Pœbrotherium*, *Dorca-therium*, *Leptauchenia* and *Protomeryx*; 8 species of *pachyderms* of the genera *Hyopotamus*, *Elotherium*, *Titanotherium*, *Palæochoerus*, *Leptochoerus*, *Hyracodon* and *Rhinoceros*; of *solipeds*, a species of *Anchitherium*; of *rodents*, 4 species of the genera *Chalicomys*, *Ischyromys*, *Palæolagus* and *Eumys*; of *carnivora*, 7 species of the genera *Hyænodon*, *Amphicyon*, *Drepanodon*\* and *Deinictis*; and the turtle forms the type of the extinct genus, *Stylemys*.

\*The name *Drepanodon*, was applied by Nesti, as early as 1826, to the sabretoothed tiger, for which, subsequently, a number of other names have been employed—that of *Machairodus* of Kamp, being the most familiar. The author of the above remarks applied the name *Drepanodon*, in 1856, to an extinct reptile or fish, a tooth of which was discovered by Prof. E. Emmons, at Cape Fear, North Carolina. (See Proceedings of Acad. Nat. Sci. Vol. VIII. 255.) The author would now substitute the name *Lesticodus impar*, Leidy, for the animal.

From a later tertiary formation than the one just indicated, and suspected to be of pleiocene age, on the Neobrara river, explored in the recent expedition of Lieut. G. K. Warren to Nebraska, Dr. Hayden, geologist to the expedition, collected a large quantity of fossil bones. These are of especial interest as indicating a fauna more nearly allied to the existing fauna of Asia and Africa than to our own. In the collection submitted to the examination of Dr. Leidy, he detected the remains of 29 mammals and 1 turtle. Of these there are 10 species of *ruminants* of the genera *Cervus*, *Merycodus*, *Procamelus*, *Megalomeryx*, *Merycochærus* and *Merychys*; 3 *pachyderms* of the genera *Rhinoceros*, *Mastodon* and *Elephas*; of *solipeds*, 8 species of the genera *Equus*, *Hipparion*, *Protohippus*, *Hypohippus*, *Parahippus* and *Merychippus*; of *rodents*, 2 species of the genera *Hystrix* and *Castor*; of *carnivora*, 6 species of the genera *Canis*, *Felis* and *Aelurodon*; and the turtle appears to be a species of *Stylemys*.

From the green sand formation of the cretaceous period, through which courses the Missouri and its tributaries, the Grand, Moreau and Cheyenne rivers, with a part of White river, the remains of numerous species of mollusks have been obtained. From this formation it was that Maximilian, Prince of Neuwied, obtained the skull and vertebral column of *Mososaurus Missouriensis*, described by Dr. Goldfusz, and now preserved in the Museum of Bonn. Teeth of sharks and remains of sphyraenoid fishes have also been discovered in the same formation.

From the great lignite basin, an estuary formation of the middle tertiary period, covering many thousand square miles at the upper part of the Missouri river, Dr. Hayden obtained remains of numerous species of plants, mollusks and vertebrates. This basin, and the remains of the vertebrated animals discovered in it, form part of the material of the papers presented to the Society this evening.

The bad lands of the Judith river, a tributary to the head waters of the Missouri, with the vertebrate remains discovered by Dr. Hayden, in those lands, form the other part of the subject matter of the papers just mentioned.

The papers presented by Dr. Leidy, for the Transactions, were entitled: A Geological Sketch of the Estuary and Fresh-water Deposit of the Bad Lands of the Judith, with some remarks upon the surrounding formations, by F. V. Hayden, M.D.; and On extinct Vertebrata from the Judith and Great Lignite Formations of Nebraska, by Joseph Leidy, M.D. Both papers

were referred to a committee consisting of Dr. Le Conte, Mr. Lesley and Dr. Caspar Wister.

Pending nomination No. 388, and new nomination No. 389, were read.

The committee to consider the condition of the Society not being prepared to report, was continued, with leave to report when prepared.

On motion of Dr. Le Conte, the application of the heirs of Joseph Horsfield was referred to the Committee on the Library, with power to act, and the Society was adjourned.

*Stated Meeting, March 18, 1859.*

Present, twenty-four members.

Dr. WOOD, President, in the Chair.

Letters were read from C. C. Rafn, dated Copenhagen, Sept. 3, 1858, expressing the desire of the Royal Society of Northern Antiquarians to address its memoirs and reports to foreign societies;—and from the Lyceum of Nat. Hist., dated New York, March 12, 1859, acknowledging the receipt of the proceedings, Vol. VI. No. 59.

The following donations for the Library were announced:—

- Proceedings . . . Mass. Hist. S. in respect to the memory of W. H. Prescott, Feb. 1, 1859. Boston. (53 pp.) 8vo.—*From the Soc.*  
 Report of Hist. and Progress of Am. Coast Survey, to 1858. By the committee of twenty appointed by the A. A. S., August, 1857. (88 pp.) 8vo.  
 Proceedings Am. Antiq. S. Special Meeting, Feb. 10, 1859.—*From the Society.*  
 Soc. R. des Antiq. du Nord. List, &c., 1858. (8 pp.) 8vo.—*From the Society.*  
 Sur la Construction des Salles dites des géants, par S. M. le roi Frédéric de Danemark. Copenha. 1857. (19 pp.) 8vo.—*From the same.*  
 Cabinet d'Antiq. Amer. a Copenhague, 1858. (60 pp.) 8vo.—*From the same.*